

BATTERY HAVING ION CONDUCTIVE VITREOUS LAYER AND ITS MANUFACTURE

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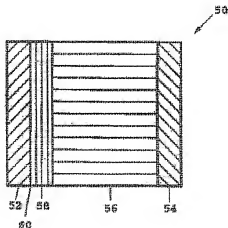
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Abstract of JP 2001052758 (A)

PROBLEM TO BE SOLVED: To prevent the production of a dendroid crystal and degradation in conjunction with it when metal lithium is used as an active material and thereby provide a battery having an improved cycle rate by providing at least one of a first electrode and a second electrode with a collector having a surface and a vitreous layer associated with the surface of the collector.

SOLUTION: This battery 50 comprises a first electrode 52, a second electrode 54, an electrolyte 56 and a vitreous layer 58. A transition metal, an alkaline metal or the like can be used for a metal collector, and the electrolyte 56 is formed of a salt of LiPF₆ or the like dissolved in a solvent of propylene carbonate or the like. Preferably, the first electrode provided with a collector having a surface is manufactured, the vitreous layer is associated with the surface of the collector, the second electrode having a surface is manufactured, and at least one kind of electrolyte is associated with the first and second electrodes. Preferably, the vitreous layer contains an inorganic acid salt of lithium, and lithium polysilicate, and the battery has a channel capable of passing lithium ions.



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